Quad Charts

PAP 01 through 16

July 2, 2010

Program Management Office

Status of PAP01: Role of IP in the Smart Grid

Updated June 30, 2010.

A#	Current Activities and Accomplishments
A3	Completed initial set of application requirements for select scenarios by Open SG-Net
A4	Compiling additional requirements from industry documents in cooperation with Open SG-net Working Group

S	D#	Deliverables
✅	D1	Application communication requirements matrix
🟢	D2	IETF RFC supporting meter communication standard(s) (ANSI C12.22)
🟢	D3	Standards gap analysis
✅	D4	Identify Core set of IP protocols
🟢	D5	Revised Scope (see proposed tasks in file below)

I#	Issues, Concerns & Help Needed
I1	Need to develop guidelines on the use of IPv4 versus IPv6
I2	Need to compile and use requirements for systems and network management functions in order to develop protocols and guidelines for SG management and security
I3	Address scope issues because it is very broad and see if it can be potentially narrowed

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
✅	TPMO2	PAP Charter Developed	2009-10	2009-10	SGIP	
✅	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-11	2010-07	SGIP	
	TPMO5	SSO Identified	2010-07		Open SG-net IETF	D1, D3 D2, D4
	TPMO6	Development of Requirements By PAPWG	2010-10		SGIP	
	TPMO7	Requirements Handoff to SSO	2010-12		SSO	
	TPMO8	Standards Handback to PAPWG from SSO				
	TPMO9	SSO Results submitted to GB by PAP after completing analysis				
	TPM10	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Develop a set of requirements for different Smart Grid applications	Dec-2009	Dec-2009	Open SG-net	D1
✅	T2	Identify a core Protocol Suite for IP-based Smart Grid	Dec-2009	Dec-2009	IETF	D4
🟢	T3	Develop application specific protocol	Jul-2010		Open SG-net	D1

		requirements				
🟢	T4	Perform gap analysis	Jul-2010		IETF	D3, D4
🟢	T5	Deliver RFC on C12.22 to ANSI	Jul-2010		IETF	D2
🟢	T6	Meet at OpenSG on July 22 to discuss scope issues (I3)	Jul-2010		PAP	D5

Status	Schedule	Deliverables	Resources
January 2010	🟡	🟢	🟢
February 2010	🟢	🟢	🟢
March 2010	🟢	🟢	🟢
April 2010	🟡	🟡	🟢
May 2010	🟡	🟡	🟢
June 2010	🟡	🟢	🟡

Status of PAP02: Wireless Communications for the Smart Grid (6.1.5)

Updated May 27, 2010.

A#	Current Activities and Accomplishments
A4	Initial set requirements for AMI and Distribution Automation completed with Open SG-Net
A5	Initial Guidelines Document Outline Developed and Chapters in Development

S	D#	Deliverable
✅	D1	Application Communication Requirements Matrix Template
✅	D2	Application communication matrix
✅	D3	Wireless Capability Matrix Template
✅	D4	Wireless capability matrix
🟢	D5	Standards development guidelines

I#	Issues, Concerns & Help Needed
I1	Call for input to Task 1 to compile additional application communication requirements with specific quantitative data needed for further evaluating wireless communication technologies
I2	Call for input to Task 6 to contribute tools and methods and conduct the evaluation of wireless technologies based on the application requirements

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-08	2009-08	SGIP	All
✅	TPMO2	PAP Charter Developed	2009-11	2009-11	SGIP	All
✅	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	All
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-01	2010-01	SGIP	All
✅	TPMO5	NIST Technical Wireless Evaluation Model	2009-12	2009-12	NIST	D5
✅	TPMO6	Development of Requirements By Open SG-Net	2010-05	2010-05	Open SG	D1,D2
✅	TPMO7	SSO Wireless Capabilities Matrix	2010-01	2010-01	SSOs	D3,D4
🟢	TPMO8	Draft SG Wireless Guidelines Develoment Phase I	2010-07		Assigned	D5
🟢	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2010-09			D5
	TPM10	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	NIST Technical Wireless Evaluation Model Development	Dec 2009	Dec 2009	NIST Technical	D5
✅	T2	SSO Requirements	May	May	Open SG Net	D1,D2

		Development by Open SG Net	2010	2010		
✅	T3	SSO Wireless Capabilities Matrix	Jan 2010	Jan 2010	IEEE 802, 3GPP,3GPP2, ATIS, TIA	D3,D4
🟢	T4	Draft Smart Grid Wireless Guidelines Report	July 2010		PAP 2 and SSO Contributors	D5
🟢	T5	NIST Reviews and Publishes Wireless Guidelines Report (NISTIR)	Sept 2010		NIST Technical	D5
🟢	T6	PAP 2 Analyses Report and Submits to SGIP GB	Sept-2010		PAP 2 SSOs and Contributors	D5

Status	Schedule	Deliverables	Resources
January 2010	🟢	🟢	🟢
February 2010	🟢	🟢	🟢
March 2010	🟢	🟢	🟢
April 2010	🟢	🟢	🟢
May 2010	🟢	🟢	🟢
June 2010	🟢	🟢	🟢

Status of PAP03: Develop Common Specification for Price and Product Definition

Updated June 30, 2010.

A#	Current Activities and Accomplishments
A10	PAP03WG has met most recently on June 9, 2010
A11	PAP03WG defining next steps for requirements evaluation, met on June 16 and accepted requirements for balloting
A12	PAP03WG defining next steps for deliverables evaluation
A13	PAP03WG met on June 21, 2010, in Knoxville to evaluate EMIX specification
A14	PAP03WG approved core requirements on June 21
A15	Comments sent to EMIX week of June 21 and June 28

S	D#	Deliverable
✅	D1	High level scoping document
✅	D2	Price use cases and requirements
✅	D3	Information model and summary of product characteristics of interest to energy consumers
✅	D4	Draft price and product defintiion specification to others
✅	D5	Requirements Evaluation and Artifacts
TBD	D6	Deliverables Evaluation and Artifacts

I#	Issues, Concerns & Help Needed
I1	Need focused coordination with DER & PEV PAPs and to include specific tasks in PAP09 and PAP11
I5	D3 and D4 deliverables are drafts out for review. Need a process to measure closure of Tasks and Deliverables.
I6	Need to setup team(s) to review requirements and deliverables once process is defined via I5.

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-07	2009-07	PAP03WG	TWiki
✅	TPMO2	PAP Charter Developed	2009-08	2009-08	PAP03WG	TWiki
✅	TPMO3	Form Initial Team	2009-08	2009-08	PAP03WG	TWiki
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-08	2009-08	PAP03WG	TWiki
✅	TPMO5	SSO Identified	2009-07	2009-07	PAP03WG	TWiki
🟢	TPMO6	Development of Requirements By PAPWG	2010-07		PAP03WG	D5
🟢	TPMO7	Requirements Handoff to SSO	2010-07		PAP03WG	D5
🟢	TPMO8	Standards Handback to PAPWG from SSO	2010-12		NAESB, OASIS	
🟢	TPMO9	SSO Results submitted to GB by PAPWG after completing analysis	2011-01		PAP05WG	D6
🟢	TPM10	PAP Complete	2011-04		SGIPGB	N/A

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Develop high level scoping document	2009-11	2009-11	NAESB	D1

✅	T2	Develop price and product definition use cases & requirements	2009-11	2010-04	NAESB	D2
✅	T3	Meet and present status on deliverables at Grid-Interop	2009-11	2009-11	PAP03WG	D1
✅	T4	Plan to import and use material from PAP04	2009-12	2009-12	NAESB	D2
✅	T5	Plan to import and use material from PAP04	2009-12	2009-12	OASIS	D3
✅	T6	Plan to import and use material from PAP04	2009-12	2010-05	ZigBee	D3
✅	T7	Data model draft publicly visible	2010-02	2010-02	OASIS	D3
✅	T8	Data model draft publicly visible	2010-02	2010-04	ZigBee	D3
✅	T9	Draft price and product definition specification to others	2010-04	2010-05	OASIS	D4
✅	T10	Draft price and product definition specification to others	2010-04	2010-04	ZigBee	D4
✅	T11	Requirements evaluation; define scope/schedule/deliverables	2010-06	2010-06	PAP03WG	D5
TBD	T12	Deliverables evaluation; define scope/schedule/deliverables	TBD	TBD	PAP03WG	D6

Status	Schedule	Deliverables	Resources
May 2010	🟢	🟢	🟢
June 2010	🟢	🟢	🟢

Status of PAP04: Develop Common Scheduling Mechanism for Energy Transactions

Updated May 26, 2010.

A#	Current Activities and Accomplishments
A10	Use Cases and requirements delivered April 2010
A11	Deliverable D3 completed April 2010
A12	APIs for calendar to calendar communications in public review May 2010
A13	WS-Calendar public review started May 2010, ends June 21, 2010, sent to IEC participants
A14	xCal submitted to IETF to finish Standards Track process

S	D#	Deliverable
✅	D1	Update pre-existing IETF standards for extensibility
✅	D2	Standard XML Serialization for Bi-directional Translation
✅	D3	Use cases and requirements to test the standard
✅	D4	Associated semantics for schedule performance related to WS-Calendar standard
✅	D5	Create essential WS APIs for Calendars and Schedules
🔄	D6	Allign APIs and semantics across SDOs

I#	Issues, Concerns & Help Needed
I2	Other PAPs need to clarify their consumption of PAP04 output and coordinate as necessary.
I3	OASIS work would benefit from participation of representatives of manufacturing scheduling.
I4	ISO2002 participation in OASIS TC would improve scope and acceptance of deliverable.
I5	ZigBee has not clearly addressed PAP04 in its work to date (See PAP03 tables)
I6	Need to integrate PAP07 requirements

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	XXXX-XX	XXXX-XX	SGIP	
✅	TPMO2	PAP Charter Developed	XXXX-XX	XXXX-XX	SGIP	
✅	TPMO3	Form Initial Team	XXXX-XX	XXXX-XX	SGIP	
	TPMO4	Develop List of Deliverables and Tasks with Assignments	XXXX-XX	XXXX-XX	SGIP	
	TPMO5	SSO Identified	XXXX-XX	XXXX-XX		
	TPMO6	Development of Requirements By PAPWG	XXXX-XX			
	TPMO7	Requirements Handoff to SSO	XXXX-XX			
	TPMO8	Standards Handback to PAPWG from SSO	XXXX-XX			
	TPMO9	SSO Results submitted to GB by PAP after completing analysis				
	TPM10	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Update IETF iCalendar format to allow extensibility	2010-01	2009-09	CalConnect	D1
✅	T2	Standard XML serialization of extensible iCalendar out for public review	2010-01	2009-11	CalConnect	D2

🟢	T3	Standard APIs for Calendar-to-Calendar communications for inclusion in WS-Calendar	2010-08		CalConnect	D4
✅	T4	Submit output of T2 to IETF for approval as Standards Track RFC	2010-05	2010-05	CalConnect	D1
✅	T5	Develop Smart Grid use cases and requirements for for use in WS-Calendar	2009-10	2010-04	NAESB	D3
✅	T6	Create Committee to develop service-oriented schedule profiles based on IETF xCalendar and APIs (WS-Calendar)	2010-01	2010-01	OASIS	D5
✅	T7	WS-Calendar work out for public review	2010-04	2010-05	OASIS	D5
✅	T8	Submission of WS-Calendar public review draft to IEC Power Management CIM	2010-05	2010-05	OASIS	D6
🟢	T9	Development of Requirements by PAPWG	2010-07		PAP04WG	TPM06
🟢	T10	Standards Handback to PAPWG from SSO			OASIS	TPM08

Status	Schedule	Deliverables	Resources
April 2010	🟢	🟢	🟢
May 2010	🟢	🟢	🟢
June 2010	🟢	🟢	🟢

Status of PAP05

Updated June 30, 2010.

A#	Current Activities and Accomplishments
A4	AEIC AMTI group preparing a gap report alongside the guidelines for delivery to PAP05WG and other groups
A5	AEIC AMTI group continually (weekly) revising draft document (now at Draft 8.5 on 6/30/2010)

S	D#	Deliverable
🔴	D1	Utility requirements mapping
🔴	D2	Expression of AEIC v2.0 Guidelines in terms of additional device class(es)
✅	D3	Revision of AEIC v1.0 Guidelines
✅	D4	Data type profiles for specific Use Case(s)
✅	D5	White Paper/Presentation on ANSI metering protocol standards
🔴	D6	New capabilities as developed during PAP05 work
✅	D7	Publicly available training materials
🔴	D8	Design Document
🟡	D9	Analysis
🔴	D10	Use Cases and Requirements
🔴	D11	Gap Report

I#	Issues, Concerns & Help Needed
I1	AEIC final document will be ready in July (slipping further from 5/31)
I2	Team will need broader participation for review of AEIC deliverable
I3	The delivery of the final AEIC document in July instead of 5/31 negatively impacts the schedule.

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-08	2009-08	PAP05WG	TWiki
✅	TPMO2	PAP Charter Developed	2009-08	2009-08	PAP05WG	TWiki
✅	TPMO3	Form Initial Team	2009-08	2009-08	PAP05WG	TWiki
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-08	2009-08	PAP05WG	TWiki
✅	TPMO5	SSO Identified	2009-08	2009-08	PAP05WG	TWiki
✅	TPMO6	Development of Requirements By PAPWG	2009-08	2009-08	PAP05WG	TWiki
✅	TPMO7	Requirements Handoff to SSO	2009-08	2009-08	PAP05WG	TWiki
🔴	TPMO8	Standards Handback to PAPWG from SSO	2010-06		AEIC	1,2,6,8
🟢	TPMO9	SSO Results submitted to GB by PAPWG after completing analysis	2010-07		PAP05WG	9
🟢	TPM10	PAP Complete	2010-10		SGIPGB	N/A

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
🔴	T1	Map utility requirements	05/31/2010		AEIC AMTI	D1

		expressed via AEIC Guidelines v2.0 to Device Classes [now mid July]				
🔴	T2	Express AEIC Guidelines v2.0 in terms of one or more additional Device Classes [now mid July]	05/31/2010		AEIC AMTI	D2
✅	T3	Complete revision of AEIC Guidelines v2.0	12/2009	12/11/2009	AEIC AMTI	D3
✅	T4	Minimize the variations in data types transported from and to End Devices (real-time communication and enterprise data representations).	01/31/2010	03/22/2010	AEIC AMTI	D4
✅	T5	Socialize the existence of additional Tables within ANSI C12.21-2006 and C12.22-2008 via WP/PPT report.	05/31/2010	05/25/2010	Team Members	D5
🔴	T6	Provide definitions and recommendtaions for Function Control Limiting Table values and general configuration. [now mid July]	05/31/2010		AEIC AMTI	D6
✅	T7	Develop education package around ANSI C12.18-2006, C12.19-2008, C12.21-2006 and C12.22-2008.	04/15/2010	05/17/2010	Team Members	D7
🔴	T8	Minimize variation and	06/15/2010		AEIC AMTI	D8

		maximize interoperability of Application Services and behaviors within ANSI C12.18-2006, ANSI C12.19-2008, ANSI C12.21-2006 and ANSI C12.22-2008. [now mid July]				
🟡	T9	PAP05WG to analyze D3; Will receive final deliverable mid July, will have to adjust delivery date when document is received.	07/15/2010		PAP05WG	D9
🔴	T10	Report on Use Cases and Requirements [now mid July]	05/31/2010		Team Members	D10
🔴	T11	Create and deliver Gap Report [now mid July]	06/15/2010		AEIC AMTI	D11

Status	Schedule	Deliverables	Resources
May 2010	🟡	🟡	🟡
June 2010	🔴	🔴	🟡

Status of PAP06

Updated June 30, 2010.

A#	Current Activities and Accomplishments
A1	Sub-group has begun discussion of Use Cases and Requirements
A2	F2F in Santa Clara helped define initial actions and steps

S	D#	Deliverable
🟢	D1	Key Use Cases
🟢	D2	Requirements
🟢	D3.1	Mapping between ANSI C12.19-2008 and IEC 61850
🟢	D3.2	Mapping between ANSI C12.19-2008 and MultiSpeak v4
🟢	D3.3	Mapping between ANSI C12.19-2008 and IEC 61968-9
🟢	D4	Integration and harmonization roadmap

I#	Issues, Concerns & Help Needed
I1	Need to explore explicit recruitment of new resources, including explicit experts for the different standards
I2	Need to coordinate with PAP05WG , including explicit coordination requirements (review of PAP05WG Deliverable 3)
I3	Schedule slippage of PAP05 tasks impacting PAP06 tasks (same resources involved)
I4	PAP6WG would function more efficiently if equally competent but separate resources from PAP05WG could be found

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-08	2009-08	PAP06WG	TWiki
✅	TPMO2	PAP Charter Developed	2010-01	2010-01	PAP06WG	TWiki
✅	TPMO3	Form Initial Team	2009-08	2009-08	PAP06WG	TWiki
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-01	2010-01	PAP06WG	TWiki
✅	TPMO5	SSO Identified	2010-04	2010-04	PAP06WG	TWiki
🔴	TPMO6	Development of Requirements By PAPWG	2010-06		P6WG1	TWiki
🔴	TPMO7	Requirements Handoff to SSO	2010-06		PAP06WG	
🟢	TPMO8	Standards Handback to PAPWG from SSO	2010-09			
🟢	TPMO9	SSO Results submitted to GB by PAPWG after completing analysis	2010-10		PAP06WG	
🟢	TPM10	PAP Complete	2011-01		SGIPGB	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
🔴	T1	Identify key use cases (should occur before	2010-06		P6WG1	D1

		mappings are performed)			
🔴	T2	Requirements development	2010-06		P6WG1	D2
🟡	T3.1	Define mapping between ANSI C12.19-2008 and IEC 61850 (relevant part) for the key use cases	TBD on 07/09		TBD 07/09	D3.1
🟡	T3.2	Define mapping between ANSI C12.19-2008 and MultiSpeak v4 for the key use cases.	TBD on 07/09		TBD 07/09	D3.2
🟡	T3.3	Define mapping between ANSI C12.19-2008 and IEC 61968-9 (minimally) for the key use cases	TBD on 07/09		TBD 07/09	D3.3
🟡	T4	Create roadmap to integrate and harmonize challenges with MultiSpeak, IEC and COSEM standards	TBD on 07/09		TBD 07/09	D4

Status	Schedule	Deliverables	Resources
May 2010	🟢	🟢	🟡
June 2010	🔴	🔴	🔴

Status of PAP07: Energy Storage Interconnection Guidelines

Updated June 30, 2010

A	Current Activities and Accomplishments
A5	Learned about an IEC Fast-Track "database format" process for rapid approval of additions and modifications for IEC 61850 - requiring weeks, not years! IEC TC57 WG17 agreed to use this method. It will require establishing a database of IEC 61850 object models and working with the IEC to set up the correct procedure for approving additions/modifcations.
A6	Presented ES-DER requirements to the IEC TC57 WG17, and received agreement that they would help develop the IEC 61850 object models as part of Edition 2 of IEC 61850-7-420. Edition 2 will use the Fast Track database format approach.

S	D#	Deliverable
✅	D1	Task 0 Activities: Development of Scoping Study Document (MS Word version)
✅	D2	Task 1a Use Cases: List of ES-DER Use Cases (organized by type) (MS Word version)
✅	D3	Task 4 Use Cases Descriptions for Key ES-DER Use Cases (MS Word version) - 1st draft complete
🟢	D4	Completing IEEE 1547.4 & .6 per IEEE rules See IEEE 1547 Web Page
🟢	D5	Initiated PAR for IEEE 1547.8 per IEEE rules See IEEE 1547 Web Page

I	Issues, Concerns & Help Needed
I1	See Task 4a: **PAPs 3, 4, & 9 Coordination**: Pricing and Scheduling models involving Demand Response for ES-DER systems, particularly with respect to ancillary services, such as var management, frequency regulation, and harmonic reduction
I2	See Task 4b: **PAP 10 Coordination**: Energy Usage models and interactions with utilities and 3rd Parties which involve ES-DER usage and ancillary services. The decision was made in PAP 10 to defer modeling of DER "energy usage" until later. At that time, the ES-DER Use Cases and SDO models will need to be coordinated with the types of models needed for energy usage.
I3	See Task 4c: **PAP 11 Coordination**: Interactions involving PEV battery and charger capabilities. This coordination has started, but needs to be continued as the PAP 11 Use Cases are completed and made public.
I4	See Task 4d: **PAP 16 Coordination**: Wind Plant interactions involving Energy Storage - initial review does not seem to have any specific concerns, but the models for wind and other ES-DER must remain consistent, so on-going liaisons are necessary
I5	See Task 3: **Help is requested for experts to participate in the new IEEE 1547.8** effort, including power system experts, regulatory experts, reliability experts, and experts "in the future capabilities of the Smart Grid with ES-DER".
I6	See Task 4f: **Need support to develop the IEC Fast Track database format requirements so that the IEC central office can implement the database input, output, and**

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-08	2009-08	SGIP	
✅	TPMO2	PAP Charter Developed	2009-08	2009-08	SGIP	
✅	TPMO3	Form Initial Team	2009-08	2009-08	SGIP	
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-08	2009-08	SGIP	
✅	TPMO5	SSO Identified	2009-08	2009-08	PAP 7	
✅	TPMO6	Development of Requirements By PAPWG	2010-04	2010-04	PAP 7	
✅	TPMO7	Requirements Handoff to SSO	2010-06	2010-06	PAP 7	D3 & D5
	TPMO8	Standards Handback to PAPWG from SSO	2011-06		IEEE and IEC	
	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-08		PAP 7	
	TPM10	PAP Complete	2011-11		SGIP	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T0a	Scoping Document Draft	Nov-2009	Nov 2009	PAP 7	D1

user interface as most appropriate and effective for vendors and utilities.		v1			
🔴	T0b	Scoping Document Draft v2 with additions	Mar-2010	Waiting for EPRI and other on-going input - expected by end of May	EPRI & others	D1
✅	T1	Collect Use Cases with Brief Narratives	Mid-Feb-2010	Mid-Feb list of Use Cases was completed	PAP 7 members	D2
🟢	T2	Complete IEEE 1547.4 (Draft Guide for Design, Operation, and Integration of Distributed Resource Island Systems with Electric Power System) & .6 (Draft Recommended Practice For Interconnecting Distributed Resources With Electric Power Systems Distribution Secondary Networks)	Aug-2010	1547.4 is currently in ballot, as per IEEE 1547 balloting schedule, and due for final release by July/August 2010. 1547.6 is in pre-ballot and is expected to be released by December 2010	IEEE 1547	D4
✅	T3	Initiate IEEE 1547.8 to address interconnection issues of storage (title not known yet)	Feb-2010	IEEE PAR approved in March, with first meeting scheduled for August 2010	IEEE 1547	D5
✅	T4	Prioritize and develop details for key ES-DER Use Cases	Mar-2010	April 5 2010	NIST & PAP 7	D3
✅	T4a	Provide key ES-DER Use Cases to PAPs 3, 4, and 9, and discuss whether the ES-DER schedules and pricing signal requirements are	April 2010	April 2010: Use Cases were provided	PAP 7, PAPs 3, 4, 9	D3

Status	Task	Description	Schedule	Deliverables	Resources	
		covered adequately				
✅	T4b	Provide key ES-DER Use Cases to PAP 10 and discuss whether ES-DER issues are adequately covered under Energy Usage	April 2010	April 2010: Use Cases were provided - PAP 10 has deferred ES-DER considerations	PAP 7, PAP 10	D3
✅	T4c	Provide key ES-DER Use Cases to PAP 11 and discuss if additional PEV Use Cases need to be added to ES-DER Use Cases	June 2010	May 25: Use Cases were provided to PAP 11, discussions are taking place	PAP 7, PAP 11	D3
✅	T4d	Provide key ES-DER Use Cases to PAP 16 and discuss if any addition actions need to be taken by PAP 16 for handling Wind plus ES-DER	April 2010	April 2010: Use Cases were provided - no specific issues found at this time - the IEC TC57 WG17 may pick up later	PAP 7, PAP 16	D3
✅	T4e	Develop Information Exchange requirements for key ES-DER Use Cases	June 2010	June 2010	PAP 7	D3
✅	T4f	Hand off Information Exchange requirements for key ES-DER Use Cases to IEC TC57 WGs 14 & 17	June 2010	June 2010: Object modeling requirements handed off to IEC TC57 WG17	PAP 7	D3
🟢	T5	SDOs to develop codes and test methods to ensure safe and reliable implementation of Task 3	Aug-2010		UL, NEC-NFPA70, SAE, and CSA	D5

Status	Schedule	Deliverables	Resources

| May 2010 | 🟢 | 🟢 | 🟢 |
| June 2010 | 🟢 | 🟢 | 🟢 |

Status of PAP08: CIM/61850 for Distribution Grid Management

Updated May 27, 2010

A	Current Activities and Accomplishments
A1	MultiSpeak UML modeling, CIM tools, updates to CIM modeling, and web conferences are on-going in IEC TC57 WG14.
A2	Have selected key ADA DOMA/FLIR/ VVWO Use Cases for refinement and have completed 100% of the necessary details in text form (using IntelliGrid template). These are being reviewed by the team. See D5 Deliverable.
A3	Have converted the Use Cases into UML Sequence Diagrams. After review by PAP 8 members, these will be submitted to IEC TC57 WG14 (CIM) for application-to-application interactions, and to IEC TC57 WG17 (61850) for distribution automation and DER interactions. See D6 deliverable
A4	Reached out to WG 14 and CIMug to coordinate task T2 (5/27/2010)
A5	Identified what our deliverable is to WG 14 for T9. Identified steps to produce the deliverable. (5/25/2010)

S	D#	Deliverable
✅	D1	UML Model of MultiSpeak
🟢	D2	UML Tools for CIM (deliverable is internal to IEC TC57 WG14)
✅	D3	Interoperability Test of CIM Wires Model (completed Nov 2009 - refer to IEC)
🟢	D4	Web conferences of CIM Modeling team (on-going as needed for new models)
✅	D5	Distribution_Grid_ManagementSG_UC_nm3.doc: Updated version of the DGM Use cases ADA DOMA/FLIR/ VVWO Use Cases with requirements for Distribution Grid Management
🟢	D6	ADA_Functions_-_Sequence_Diagrams.pdf: ADA_Functions_-_Sequence_Diagrams.pdf Use Cases with appropriate details for IEC TC57 WGs (61850 and CIM)
🟡	D7	IEC 61968, Parts 3 & 5, CIM updated standards to meet the PAP 8 Use Case application-to-application requirements
🟢	D8	IEC 61850-7-4xx standards to meet the PAP 8 Use Case interactions with field equipment

I	Issues, Concerns & Help Needed
I1	There may need to some assistance, possibly from IEC TC57 WG19, on determining whether certain object modeling should be undertaken in WG 14 (CIM) or WG17 (61850)
I2	On-going, cross-PAP coordination is needed, particularly when Use Cases involve not only distribution operations but also demand response, load control, and other issues being addressed by other PAPs.
I3	🔴 IEC TC57 WG14 needs additional experts and additional time from existing experts to update the CIM (IEC 61968 Parts 3 & 5, as well as other parts) to meet the requirements described in the PAP 8 Use Cases (See Help Wanted Page)

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-09	XXXX-XX	SGIP	
✅	TPMO2	PAP Charter Developed	2009-10	2009-10	SGIP	
✅	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-06	2010-06	SGIP	
✅	TPMO5	SSO Identified	2009-11	2009-11		
	TPMO6	Development of Requirements By PAPWG	2010-08			
	TPMO7	Requirements Handoff to SSO	2010-08			
	TPMO8	Standards Handback to PAPWG from SSO	2011-06			
	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-07			

	TPM10	PAP Complete		2011-10		
S	**T#**	**PAP Work Tasks**	**Due**	**Actual**	**Resp**	**D#**
✅	T1	UML model for MultiSpeak	Jun-2010		NRECA	D1
🟢	T2	Team for UML tools for CIM	Jun-2010		IEC TC57 WG14	D2
✅	T3	Team for interoperability testing	Nov-2009	Nov-2009	IEC TC57 WG14	D3
✅	T4	Web conference CIM Modeling team	Nov-2009	Nov-2009	IEC TC57 WG14	D4
✅	T5	Create SG use case team	Nov-2009	Nov-2009	Mini-T&D team	D5
✅	T6	Use Case master list	Jan-2010	Jan-2010	Mini-T&D team	D5
✅	T7	Key Use Cases prioritized and refined	Feb-2010	Feb-2010	UCI	D5
✅	T8	Review Use Cases and complete Sequence Diagrams of those Use Cases	Apr-2010	Apr-2010	NIST, PAP 8	D6
🟢	T9	Provide completed Use Cases to the IEC TC57 WGs 14 & 17	August-2010		NIST, PAP 8	D6
🟡	T10	Track progress on developing CIM and 61850 models from the Use Cases	Dec-2011?		IEC TC57 WG14 & 17	D7&8
🟢	T11	Produce Mapping betweenIEEE PC 37.239 and CIM and 61850	TBD		This is being considered for another PAP	

Status	Schedule		Deliverables		Resources	
April 2010	🟢		🟢		🟢	
May 2010	🟢		🟢		🟢	

Status of PAP09: Standard DR and DER Signals

Updated May 26, 2010.

A#	Current Activities and Accomplishments
A1	SEP2 Development on-going. Technical Requirements Document (2009-12) completed public review
A2	NAESB work substantially complete, awaiting standardization vote
A3	EnergyInterop building upon work of OpenADR
A4	Monthly PAP meetings with PAP03 and PAP04
A5	NAESB Use Cases and Requirements Delivered April 2010
A6	SEP2 Application Specification 0.7 out for public review April 2010
A7	OASIS Energy Interoperation Specification out for public review May 2010

S	D#	Deliverable
🟡	D1	Standard Vocabulary for DR and DER
🟢	D2	Direct Load Management Communication
🟢	D3	Collaborative Load Management Communication
🟢	D4	Grid safety Signals
	D5	DER support (deferred)
🟢	D6	Other signals and/or an extensibility mechanism

I#	Issues, Concerns & Help Needed
I2	Note: PAP-15 calls for a standard DR interface
I3	Completion is dependent upon completion of EMIX (PAP03)
I4	Completion is dependent upon completion of WS-Calendar (PAP04)
I5	Need to integrate PAP07 Requirements
I6	Need PAP timeline and PAP requirements per PMO

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	XXXX-XX	XXXX-XX	SGIP	
✅	TPMO2	PAP Charter Developed	XXXX-XX	XXXX-XX	SGIP	
✅	TPMO3	Form Initial Team	XXXX-XX	XXXX-XX	SGIP	
	TPMO4	Develop List of Deliverables and Tasks with Assignments	XXXX-XX	XXXX-XX	SGIP	
	TPMO5	SSO Identified	XXXX-XX	XXXX-XX		
	TPMO6	Development of Requirements By PAPWG	XXXX-XX			
	TPMO7	Requirements Handoff to SSO	XXXX-XX			
	TPMO8	Standards Handback to PAPWG from SSO	XXXX-XX			
	TPMO9	SSO Results submitted to GB by PAP after completing analysis				
	TPM10	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Collect, Analyze, and Consolidate Use Cases and deliver requirements (inc DER)	2009-10	2010-04	NAESB	D1
✅	T2	Direct Load Management: (Residential Applications)	2010-04	2010-04	Zigbee	D2

		Message Semantics Work DR, DER				
✅	T3	Collaborative Load Management: (C+I Applications) Message Semantics, DR, DER	2010-04	2010-04	OASIS	D3,D6
	T4	Coordinate and merge Direct and Collaborative Load Management development tracks.	2010-04	deferred	NAESB	D1
🟢	T5	Submit collaborative load management task outputs to IEC TC57 when completed	no date		OASIS	D3
🟢	T6	Submit direct load management outputs to IEC TC57 when completed	no date		Zigbee	D2
✅	T7	Downstream user requirements/engagement	2009-10	2009-09	LonMark BACnet	D3
✅	T8	Downstream user requirements/engagement	2009-10	2009-10	Zigbee	D2
✅	T9	Additional message requirements for Distribution (none required)	2009-10	2009-10	MultiSpeak	D1
	T10	Resale and process for safety and interconnection (deferred)	2009-10	deferred	NAESB	D5,D4
✅	T11	Vocabulary for DR, DER actor names	2009-09		NAESB	D1

Status	Schedule	Deliverables	Resources
April 2010	🟢	🟡	🟢
May 2010	🟢	🟢	🟢

Status of PAP10: Standard Energy Usage Information:

Updated June 30, 2010.

A#	Current Activities and Accomplishments
A1	NAESB Committee succesffully established to produce PAP 10 Energy Usage Information Model
A2	Completed PAP 10 requirements document and transferred to NAESB
A3	Modified task 5 due date to July 2007 to allow NAESB to summarize results
A4	Modified task 6 to represent the tiger team activity which distilled external use cases into an example straw model
A5	Revised meeting schedule to attend all NAESB standards calls (weekly) and to meet monthly for summary status
A6	NAESB held second meeting to review draft outline and they received volunteers to populate most sections with initial text by next meeting

S	D#	Deliverable
🟢	D1	Use cases and requirements for standard energy usage information exchange
✅	D2	Short term plans for near-term customer access to usage data based upon todays installed meters
🟢	D3	An Information model to satisfy present and future needs for exchange of energy usage information
🟢	D4	Implement a plan to expedite harmonized standards development and adoption

I#	Issues, Concerns & Help Needed
I1	Assist NAESB in reaching August 8 goal of draft information model standard

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-07	2009-07	SGIP	
✅	TPMO2	PAP Charter Developed	2009-07	2009-08	SGIP	
✅	TPMO3	Form Initial Team	2009-07	2009-08	SGIP	
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-07	2009-08	SGIP	
✅	TPMO5	SSO Identified	2010-06	2010-06	PAP10WG	
✅	TPMO6	Development of Requirements By PAPWG	2010-06	2010-06	PAP10WG	D1
✅	TPMO7	Requirements Handoff to SSO	2010-06	2010-06	PAP10WG	
	TPMO8	Standards Handback to PAPWG from SSO	2010-12		SSO	
	TPMO9	SSO Results submitted to GB by PAP			PAP10WG	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
		after completing analysis				
	TPM10	PAP Complete			PAP10WG	
✅	T1	Reach out to ANSI C12, IEC, ZigBee, and OASIS for formal involvement. Plan additional engagement	2009-08	2010-01	UCAIug	D1
✅	T2	Create preliminary Requirements and Use Cases for early deployment	2009-10	2009-11	UCAIug	D2
✅	T3	Reach out to additional stakeholders especially commercial, industrial, and residential	2010-01	2010-01	EIS Alliance	D1
✅	T4	Gather requirements and use cases for intra-premise scenarios that require inter-domain data exchange	2010-01	2010-01	EIS Alliance	D1
🟢	T5	Survey current practice. Gather existing usage communications between energy suppliers and consumers, including providers of intermediary services	2010-07		NAESB	D1
✅	T6	Consolidate use cases and requirements into a Basic Energy Usage Information straw model to contribute to NAESB standards	2010-06	2010-06	PAP10 individuals	D1

		process				
✅	T7	Produce first delivery information model for today's meters and infrastructure (from utility information systems)	2010-02	2010-04	UCAIug	D2
🟢	T8	Expedite harmonized standards development and adoption within the associated standards bodies	2011-01		NAESB	D4
🟢	T9	Produce Energy Usage information model specification	2010-12		NAESB	D3

Status	Schedule	Deliverables	Resources
April 2010	🟡	🟡	🟢
May 2010	🟡	🟡	🟢
June 2010	🟢	🟢	🟢

Status of PAP11: Interoperability Standards to Support Plug-in Electric Vehicles (6.2.4)*

Updated June 21, 2010.

A#	Current Activities and Accomplishments
A1	Assembled and organized PEV Use Cases from stakeholder inputs. Reformatting in NIST/EPRI template
A2	Joint Collaboration Agreement Between SAE and Smart Energy Profil signed.
A3	Tracking Smart Energy Profile 2.0 TRD developments
A4	Joint Collaboration with IEC TC57, WG 14, 17, 19, TC69 (PEV) October 2009
A5	Harmonization with CIM / IEC 61850 Onging
A6	Setting up Regulatory Affairs Task Force
A7	Face-to-Face meeting on February 4 in conjunction with OpenSG User group meetings.
A8	Collaborating with additional SDOs – IEEE, NEC, NFPA, Customer on fire, safety, building standards
A9	Face-to-Face meetings with EPRI Infrastructure Working Council. Met jointly in March 2010, next meeting June 2010.

S	D#	Deliverable
✅	D1	PEV use cases
✅	D2	Memo SAE and Smart Energy Profile
✅	D3	Map 61850 and 61968
✅	D4	Define all SDO related activities
✅	D5	Use Cases in SGIP format
✅	D6	Organize Regulatory Advisors Task Force
✅	D7	Drafting high level information model, evolve robust object models
🔵	D8	SAE Evaluation of PLC for PEVs
🔵	D9	Complete list of PEV Requirements
🔵	D10	Overcome collaborative impediments with IEC
🔵	D11	Requirements for Level 3 Connector

I#	Issues, Concerns & Help Needed
I1	IEC organization / SGIP alignment
I2	Coordinate with PAP 15 – PLC communication. Provide requirements.
I3	Coordinate with PAP07 – Energy Storage. Provide requirements

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-09	2009-09	PAPWG	
✅	TPMO2	PAP Charter Developed	2009-09	2009-09	PAPWG	
✅	TPMO3	Form Initial Team	2009-09	2009-09	PAPWG	
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-10	2009-10	PAPWG	
✅	TPMO5	SSO Identified	2009-10	2009-10	PAPWG	
	TPMO6	Development of Requirements By PAPWG	2010-08		PAPWG	
	TPMO7	Requirements Handoff to SSO	2010-08		PAPWG	
	TPMO8	Standards Handback to PAPWG from SSO	2011-05		SSO	
	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-06		PAPWG	
	TPM10	PAP Complete	2011-09		SGIPGB	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Assemble PEV related use cases	Dec-2009	Dec-2009	Arindam Maitre EPRI	
✅	T1A	Use Cases in SGIP format	Jan-2010	Dec-2009	Nathan Tenney PNL	D5
🟢	T1B	Complete PEV Data Communication Requirements for delivery to SSOs	Aug-2010		TBD	D9
✅	T2	Drafting high level information model, evolve robust object models	Feb-2010	Feb-2010	ZigBee SEP (Greg Robinson - Extensibel Solutions / Robby Simpson, GE)	D7
✅	T3	Need to overcome collaborative difficulties among SDOs	Aug-2009	Sep-2009	SAE (Jose Salazar, SCE)	D2
✅	T3A	Need to overcome collaborative difficulties with IEC	Jun-2010	Jun-2010	Eric Simmon, NIST	D10
✅	T4	Produce 61968 and 61850 documents for IEC meeting	Apr-2010	April-2010	TC57 WG 14,17,19 (Greg Robinson)	D3
✅	T5	Reviewing regulations with regulators	May-2010	May-2010	NEMA (Ben Biroschak)	D6
✅	T6	Review related standards for barrier to PEV adoption	Apr-2010	May-2010	SAE (Efrain Ornelas)	D4
🟢	T7	SAE Evaluation of PLC for PEVs	Jul-2010		SAE (Rich Scholer, FORD)	D8
🟢	T8	Develop requirements for Level 3 connector	Aug-2010		NIST (Eric Simmon)	D11

Status	Schedule	Deliverables	Resources
April 2010	🟢	🟢	🟢
May 2010	🟢	🟢	🟢

Status of PAP12: DNP3 Mapping to IEC 61850 Objects

Updated June 24, 2010.

A#	Current Activities and Accomplishments
A1	Major progress with the new IEEE P1815 - standard for DNP3. This work has occured on a very fast track with work starting January 2010. Draft standard has been submitted to IEEE SA for review and approval on May 7th. Anticipated publication is July 2010.
A2	IEC WG10 met in mid June and addressed the IEC 61850-80-5 mapping document. Outline for the new IEC Technical Report (IEC 61850-80-5) is expected shortly.
A3	Draft outline for the new (DNP Technical Committee sponsored) guideline for mapping DNP3 with IEC 61850 is under review.
A4	Coordination with PAP-7 - we are currently developing a guide on "how you use DNP for communications with inverters" to address current industry needs. Mapping document will address known requirements for inverter communications using IEC 61850.
A5	Mapping group continues to work on approach and details for the mapping.

S	D#	Deliverable
✅	D1	Use Case Diagrams and Data Flow Diagrams
✅	D2	Scope Description
🟡	D3	Use Case Descriptions
🟢	D4	IEEE Std 1815 (DNP3)
✅	D5	IEC 61850-80-5 New Work Item Proposal
🟢	D6	IEC 61850-80-5 Mapping Specification
🟢	D7	DNP3 Application Note - IEC 61850 Integration
🟢	D8	Changes to IEC 61580 Specifications
🟢	D9	Changes to DNP3 Specifications
🟢	D10	Example DNP XML and SCL files

I#	Issues, Concerns & Help Needed
I1	Need contractor help to move the work along

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
✅	TPMO2	PAP Charter Developed	2009-11	2009-11	SGIP	
✅	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-12	2009-12	SGIP	
✅	TPMO5	SSO Identified	2009-11	2009-11	SGIP	
✅	TPMO6	Development of Requirements By PAPWG	2010-04	2010-04	SGIP	
✅	TPMO7	Requirements Handoff to SSO	2010-05	2010-05	SGIP	
	TPMO8	Standards Handback to PAPWG from SSO	2011-04		SDO	D4, D6, D7
	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-05		SGIP	

	TPM10	PAP Complete		2011-06	SGIP	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Create a proposed outline for a new scoping document.	Jan-2010	Jan-2010	Ron Farquharson	D2
✅	T2	Create data flow diagrams	Mar-2010	Mar-2010	Grant Gilchrist	D1
✅	T3	Create drafts of the use case description based on the topology diagrams	Apr-2010	Apr-2010	Grant Gilchrist	D3
✅	T4	Support IEEE PES Substations WG-C12 with IEEE P1815 - new IEEE standard for DNP	May-2010	May-2010	Ron Farquharson, Lee Smith, Parker McCauley	D6
✅	T5	Define what key data types are required for SCADA	May-2010	May-2010	Rick Murphy	D7
✅	T6	Modify existing architecture diagrams to add DNP to field devices, electronic security perimeter	Apr-2010	Apr-2010	Rick Murphy	D1
🟢	T7	Locate example mappings (existing products) for DNP3 to IEC61850	August-2010		Bruce Muschlitz	D10
🟢	T8	Finalize outline for the IEC 61850-80-5 Technical Report (Mapping DNP with 61850)	August-2010		Christoph Brunner	D6
🟢	T9	Finalize outline for the (DNP Technical Committee sponsored) guideline for	August-2010		Rick Murphy	D7

	mapping DNP3 with IEC 61850.			

Status	Schedule	Deliverables	Resources
January 2010	🟡	🔴	🔴
February 2010	🟡	🟡	🔴
March 2010	🟡	🟡	🟡
April 2010	🟡	🟡	🟡
May 2010	🟡	🟡	🔴
June 2010	🟡	🟡	🔴

Status of PAP13: Harmonization of IEEE C37.118 with IEC 61850 and Precision Time Synchronization

Updated June 24, 2010.

A#	Current Activities and Accomplishments
A1	IEEE PSRC H11 (C37.118) are in the process of PAR revisions and IEEE Working Group changes in support of the decision to split standard (communications and measurement). New PSRC Working Group 19 has been formed to address the update of the communications portion of C37.118 and to work with the IEC to map with 61850.
A2	IEEE PSRC H7/C7 - IEEE PC37.238 (Power Profile for IEEE 1588) is now Draft 5.0 and is in a pre-ballot review. Lots of good work is happening with this effort. Expecting a sponsor ballot in Sept 2010.
A3	IEC WG10 met in mid June and addressed the IEC 61850-90-5 mapping document.
A4	Next steps for the C37.118 Gap List (Enhancement) list is to decide which enhancements to implement on an updated C37.118 communications standard vs which to implement with IEC 61850-90-5 (new Technical Report for Phasor Data Communications)
A5	IEC WG10 mapping task force are continuing with actions to update the use cases and define a roadmap for migration

S	D#	Deliverable
✅	D1	Harmonization use cases and requirements
✅	D2	C37.118 Enhancement (gaps) List
🟡	D3	IEC 61850-90-5 Mapping document
✅	D4	1588 Time Sync Demo
🟡	D5	1588 Power Profile is IEEE PC37.238
🟢	D6	Amendments to IEC 61850 documents
🟢	D7	Amendments to IEEE C37.118 document(s)
🟢	D8	Guideline for Harmonizing C37.118-2005 with IEC 61850

I#	Issues, Concerns & Help Needed
I1	Need contracted help to move the work along

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
✅	TPMO2	PAP Charter Developed	2009-11	2009-11	SGIP	
✅	TPMO3	Form Initial Team	2009-11	2009-11	SGIP	
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2009-12	2009-12	SGIP	
✅	TPMO5	SSO Identified	2009-11	2009-11	SGIP	
✅	TPMO6	Development of Requirements By PAPWG	2010-06	2010-06	SGIP	
	TPMO7	Requirements Handoff to SSO	2010-07		SGIP	
	TPMO8	Standards Handback to PAPWG from SSO	2011-04		SSO	D3, D5 - D8

	TPMO9	SSO Results submitted to GB by PAP after completing analysis	2011-05		[SGIP]
	TPM10	PAP Complete	2011-06		[SGIP]

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Requirements document for Synchrophasors	Sep-2009	Oct-2009	Mark Adamiak	D1
🟡	T2	Create outline for IEC mapping document (IEC 61850-90-5)	June-2010		HTF3 - Joint IEEE/IEC	D3
🟡	T3	Create the draft IEC mapping document (90-5)	Dec-2010		IEC WG10	D3
🟢	T4	IEEE PSRC H7 - Power Profile for IEEE 1588 - sponsor ballot	Sept-2010		IEEE H7/C7	D5
✅	T5	Interop demo 1588	Jan-2010	Jan 2010	IEEE H7/C7	D4
🟡	T6	Validate time synchronization requirements	Aug-2010		NIST	D5
🟢	T7	Differences in time stamps C37.118 / IEC 61850	Aug-2010		TC57/WG10	D3
🟢	T8	Amendments to IEC 61850	Jan-2011		TC57/WG10	D6
🟢	T9	NIST Testbed for 1588 - Requirements	Aug-2010		NIST	D5
🟢	T10	Create a list of enhancements and gaps for C37.118-2005	May-2010	May-2010	Mark Adamiak	D2, D7
🟢	T11	Outline for the Guideline for Harmonizing C37.118-2005 with IEC 61850	Aug-2010		Ron Farquharson	D8

Status	Schedule	Deliverables	Resources
January 2010	🟡	🔴	🔴
February 2010	🟡	🟡	🔴
March 2010	🟡	🟡	🔴
April 2010	🟡	🟡	🔴
May 2010	🟡	🟡	🔴

Status of PAP14: Transmission and Distribution Power Systems Model Mapping (11.2.1)

Updated July 1, 2010.

A#	Current Activities and Accomplishments
A3	IEEE C37.239 in recirculation to make it a full standard
A4	Use Cases for Advanced Distribution Developed (PAP 8 Coordination done)
A5	IEEE H5 Committee working on settings, results to be forwarded to IEC TC 57 WG10
A6	Advanced Distribution Operations Use Case to be imported into CASE Tool

S	D#	Deliverable
✅	D1	Report on the impact of C37.239 on CIM and IEC 61850
🔴	D2	A master list of use cases (task 6)
🔴	D3	New and refined use cases (task 7)
🟡	D4	Updates of models (task 7)

I#	Issues, Concerns & Help Needed
I1	Work requires specialized expertise from participants within the key SDOs IEEE PSRC and IEC TC 57
I3	Need help in Relay Settings standards development integrating IEEE PSRC and IEC Standards
I4	Need help in developing identified use cases in sufficient detail to contribute to standards development

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2009-09	2009-09	SGIP	
✅	TPMO2	PAP Charter Developed	2009-09	2009-09	SGIP	
✅	TPMO3	Form Initial Team	2009-09	2010-03	SGIP	
	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-03	2010-06	SGIP	
	TPMO5	SSO Identified	2010-01	2010-01		
	TPMO6	Development of Requirements By PAPWG	2010-08			
	TPMO7	Requirements Handoff to SSO	2010-09			
	TPMO8	Standards Handback to PAPWG from SSO	2010-11			
	TPMO9	SSO Results submitted to GB by PAP after completing analysis				
	TPM10	PAP Complete				

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Investigating impact of IEEE PC37.239	Dec-2009	May 2010	Hughes	D1
✅	T2	In the process of creating team to identify Use Cases	April-2010	May 2010	Hughes	D2
✅	T3	Creating initial use case team – T&D DEWG	Sep-2009	March-2010	Hughes	D2
🟡	T4	Creating use case master list, set priorities	Dec-2009		WG 19	D2
🟡	T5	Refining use cases	Jun-2010			D3

🟡	T6	Reviewing and assigning use cases – WG19 Smart Grid TF to review and assign to other TF's	May-2010			D3
🟢	T7	Working to develop models	Dec-2010			D4

Status	Schedule	Deliverables	Resources
January 2010	🟡	🟢	🟢
February 2010	🟡	🟡	🟡
March 2010	🟡	🟡	🟡
April 2010	🟡	🟡	🟡
May 2010	🟡	🟡	🔴
June 2010	🟡	🟡	🔴

Status of PAP15: Harmonize Power Line Carrier Standards for Appliance Communications in the Home

Updated April 29, 2010.

A#	Current Activities and Accomplishments
A1	Coexistence subgroup meetings occur every two weeks: every 2nd and 4th Tuesday of the month, 11am-12:30pm ET
A2	Agreed on action plan composed of Tasks 1, 2, and 3
A3	Created two PLC focus groups, one on low frequency narrowband and one on high frequency broadband technologies
A3	Received the following documentation • ISP coexistence specifications contained in IEEE P1901 Draft (D2.01) • G.cx coexistence specifications (Recommendation ITU-T G.9972, version consented in Oct. 2009) - see attachment at end of page • Report from EPRI on appliance connector (document refers to an in-line connector, interfacing the homeowner's communications with the appliance) - see attachment at end of page • List of the Functional Technical Requirements developed for the coexistence/interoperability cluster by the IEEE 1901 Working group. • Home Appliance Requirements (AHAM whitepaper) - see attachment at end of page • Open Han requirements - see attachment at end of page
A4	Task 1 and 2 completed - deliverables posted

S	D#	Deliverable
✅	D1	Final Task 1 Deliverable and supporting documents
✅	D2	Final Task 2 Deliverable
🟢	D3	Intermediate reports available

I#	Issues, Concerns & Help Needed
I1	Ongoing discussions on whether: - Only SDO-based technologies or also proprietary ones should have access to the implementation of coexistence mechanisms - SDO-based technologies should have priority over proprietary or industry alliance backed ones in accessing channel resources

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	XXXX-XX	XXXX-XX	SGIP	
✅	TPMO2	PAP Charter Developed	XXXX-XX	XXXX-XX	SGIP	
✅	TPMO3	Form Initial Team	XXXX-XX	XXXX-XX	SGIP	
	TPMO4	Develop List of Deliverables and Tasks with Assignments	XXXX-XX	XXXX-XX	SGIP	

A possible resolution is to adopt the same rationale adopted in IEEE 1901 and ITU-T G.hn: limit access to ISP resources only to specific SDO-based technologies: IEEE 1901 Access and In-Home, and ITU-T G.hn

I2 Ongoing discussions on whether coexistence should include installed base of PLC technologies and how

Partial alleviation of this problem can be achiebved using the techniques described in ITU-T Contribution 09GS-078 (ITU-T_Contribution_09GS-078_for_PAP15.pdf)

TPMO5	SSO Identified	XXXX-XX	XXXX-XX
TPMO6	Development of Requirements By PAPWG	XXXX-XX	
TPMO7	Requirements Handoff to SSO	XXXX-XX	
TPMO8	Standards Handback to PAPWG from SSO	XXXX-XX	
TPMO9	SSO Results submitted to GB by PAP after completing analysis		
TPM10	PAP Complete		

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Create a list of existing PLC technologies and revise them according to home appliances requirements	March 23rd, 2010	March 23rd, 2010	Subgroup on coexistence	Final deliverable posted
✅	T2	Create a list of existing coexistence mechanisms and revise them according to home appliances requirements	March 23rd, 2010	April 13th, 2010	Subgroup on coexistence	Final deliverable posted
🟢	T3	Harmonize coexistence standards if multiple candidates are found	PAP-15 group will be active until: a) IEEE and ITU finalize the alignment of the BB-PLC coexistence specs		Subgroup on coexistence	a) Work completed, BB coexitence standards approved by ITU-t and IEEE in June 2010. b) Work in progress.

			b) NB-PLC coexistence project is launched by an SDO of choice and completed the standard		

Status	Schedule	Deliverables	Resources
January 2010	🟢	🟢	🟢
February 2010	🟢	🟢	🟢
March 2010	🟢	🟢	🟢
April 2010	🟢	🟢	🟢
May 2010	🟢	🟢	🟢
June 2010	🟢	🟢	🟢

Status of PAP16: Wind Plant Communications

Updated June 22, 2010.

A#	Current Activities and Accomplishments
A1	Mapping IEC 61400-25 to NIST conceptual model complete
A2	Single set of requirements consolidated from use cases
A3	Mapping requirements to 61400-25 begun
A4	Team established to develop SDO selection plan per rules
A5	Held conversations with IEC regarding SDO selection
A6	

S	D#	Deliverable
✅	D1	Requirements related to wind power plant communications from use cases
🌐	D2	Requirements mapping and gaps existing between 61400-25 standard and Task 1 use cases
🌐	D3	Best practices on the application of 61400-25 in the US
🌐	D4	Specific recommendations to the IEC TC 88 working group

I#	Issues, Concerns & Help Needed
I1	Need to select new, qualified SDO
I2	
I3	Coordinate and collaborate with PAP 7
I4	May need to collaborate with PAP 12

S	T#	PMO PAP Milestones	Due	Actual	Resp	D#
✅	TPMO1	PAP Initiation	2010-01	2010-01	SGIP	
✅	TPMO2	PAP Charter Developed	2010-02	2010-02	SGIP	
✅	TPMO3	Form Initial Team	2010-03	2010-03	SGIP	
✅	TPMO4	Develop List of Deliverables and Tasks with Assignments	2010-04	2010-04	SGIP	D1
🔴	TPMO5	SSO Identified	2010-02	2010-02	PAP16wg	D1
🌐	TPMO6	Development of Requirements By PAP 16 WG	2010-09		PAP16wg	D2,D3
🌐	TPMO7	Requirements Handoff to SSO	2010-09		PAP16wg	D4
🌐	TPMO8	Standards Handback to PAPWG from SSO	2011-04		SSO	
🌐	TPMO9	SSO Results submitted to GB by PAP	2011-06		PAP16wg	

		after completing analysis				
🟢	TPM10	PAP Complete	2011-08		PAP16wg	

S	T#	PAP Work Tasks	Due	Actual	Resp	D#
✅	T1	Develop requirements related to wind power plant communications from use cases	June-2010	June-2010	UWIG et al	D1
🟢	T2	Map the requirements of task 1 into 61400-25. Starting with the elements of the Table of Contents of 61400-25	July-2010		UWIG/61400-25 User Group	D2
🟢	T3	Develop a best practices list for the application of 61400-25. Identify opportunities to harmonize the CIM and 61400-25	September-2010		UWIG/All	D3
🟢	T4	Provide specific recommendations to IEC TC 88 through USTAG for 61400-25 and follow-up	November-2010		All/UWIG/61400-25 User Group	D4
🟢	T5	Coordinate with PAP 7 in extending ES-DER standards to transmission level	September-2010		PAP 16 / PAP 7	D4

Status	Schedule	Deliverables	Resources
May 2010	🟢	🟢	🟢
June 2010	🟢	🟢	🟢